# M.Sc. (Part—I) Semester—II (CBCS Scheme) Examination GEOLOGY

## Paper-VI

(Metamorphic Petrology)

Time—Three Hours]

[Maximum Marks-80

- Note:—(1) All questions are compulsory and carry equal marks.
  - Draw neat sketches wherever necessary.
- 1. Write in brief on the following:
  - (a) Structure of metamorphic rocks.
  - (b) Kinds of metamorphism.

## OR

Write in brief on the following:

- (c) Textures of metamorphic rocks.
- (d) Metamorphic facies.
- 2. Describe in detail about the nature of metamorphic reactions with suitable example.

OR

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Describe the various characteristic metamorphic zones and subfacies.

 Discuss in detail about the isoreaction grid with suitable examples.

### OR

Describe in detail about the Schrienmake's rule and construction of petrogenetic grids.

- 4. Write in brief on the following:
  - (a) Origin of migmatites.
  - (b) Anataxis.

#### OR

Write in brief on the following:-

- (c) Plate tectonic related metamorphism
- (d) Regional metamorphism.
- 5. Write in brief on the following:
  - (a) Polymetamorphism.
  - (b) Ocean floor metamorphism.

## OR

Write in brief on the following:-

- (c) Shock metamorphism.
- (d) Pressure and time paths in metamorphism.